

OFFICE JCT 194  
JUL 07 2005  
PATENT & TRADEMARK OFFICE

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# TRANSMITTAL FORM

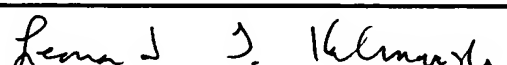
(to be used for all correspondence after initial filing)

Application Number	10/655,777
Filing Date	09/05/2003
First Named Inventor	Thomas L. Beck
Art Unit	2811
Examiner Name	
Total Number of Pages in This Submission	
Attorney Docket Number	6514

## ENCLOSURES (check all that apply)

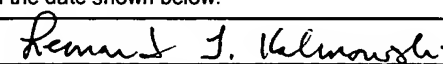
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): Postcard Transmittal of IDS, with copies of non-patent references
<b>Remarks</b>		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm	Reinhart Boerner Van Deuren s.c.		
Signature			
Printed Name	Leonard J. Kalinowski		
Date	July 5, 2005	Reg. No.	24,207

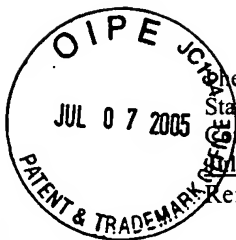
## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Leonard J. Kalinowski	Date	July 5, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. MW/1214332

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 5, 2005.

## PATENT APPLICATION

Reinhart Boerner Van Deuren s.c.

By: Leonard J. Kalinowski  
Leonard J. Kalinowski

Date: July 5, 2005

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

GROUP ART UNIT: 2811

#### EXAMINER:

In re application of: Thomas L. Beck et al. )

Application No: 10/655,777 )

Filed: September 5, 2003 )

Confirmation No.: 7225 )

Attorney Docket No. 6514 )

Customer No. 22922 )

For: ROD PUMP CONTROL  
SYSTEM INCLUDING  
PARAMETER ESTIMATOR

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

July 5, 2005

#### TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT WITHIN THREE MONTHS OF FILING OR BEFORE MAILING OF FIRST OFFICE ACTION (37 CFR 1.97(b))

NOTE: "An information disclosure statement shall be considered by the Office if filed: (1) within three months of the filing date of a national application; (2) within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; or (3) before the mailing date of a first Office action on the merits, whichever event occurs last." 37 CFR 1.97(b).

NOTE: The "filing date of a national application" under 37 CFR 1.97(b) has two possible meanings. Where the filing is a direct one to the United States Patent & Trademark Office, the filing is defined in 37 CFR 1.53(b) as "the date on which: (1) A specification containing a description pursuant to § 1.71 and at least one claim pursuant to § 1.75; and (2) any drawing required by § 1.81(a), are filed in the Patent and Trademark Office in the name of the actual inventor or inventors as required by § 1.41." 37 CFR 1.97(b)(1). On the other hand, an international application that enters the national stage occurs when the applicant has filed the documents and fees required by 35 U.S.C. § 371(c) within the periods set forth in § 1.494 or § 1.495. 35 U.S.C. § 371(c) requires the filing of the following: (1) the national fee; (2) a copy of the international application, unless already sent by the International Bureau, and an English translation if filed in another language; (3) amendments under PCT Article 19, with a translation into English if made in another language; (4) an oath or declaration; and (5) a translation into English of any annexes to the International preliminary examination report, if such annexes were made in another language. 37 CFR 1.97(b)(2).

## IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 CFR 1.97(b).

NOTE: "No certification or fee is due when the filing is made within the above time period. It is advisable to ensure that no Office action has been mailed if the disclosure statement is delayed until after three months from filing.

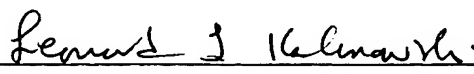
NOTE: "An information disclosure statement will be considered to have been filed on the day it was received in the Office, or on an earlier date of a mailing if accompanied by a properly executed certificate of mailing under 37 CFR 1.8, or Express Mail certificate under 37 CFR 1.10. An Office action is mailed on the date indicated in the Office action." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

NOTE: "The term 'national application' includes continuing applications (continuations, divisions, continuations-in-part) so three months will be measured from the actual filing date of an application as opposed [sic] to the effective date of a continuing application." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

NOTE: "An action on the merits means an action which treats the patentability of the claims in an application, as opposed to only formal or procedural requirements. An action on the merits would, for example, contain a rejection or indication of allowability of a claim or claims rather than just a restriction requirement (37 CFR 1.142) or just a requirement for additional fees to have a claim considered (37 CFR 1.16(d)). Thus, if an application was filed on Jan. 1 and the first Office action on the merits was not mailed until six months later on July 1, the examiner would be required to consider any proper information disclosure statement filed prior to July 1." Notice of April 20, 1992 (1138 O.G. 37-41, 39).

WARNING: "A petition for suspension of action to allow applicant time to submit an information disclosure statement will be denied as failing to present good and sufficient reasons, since 37 CFR 1.97 provides adequate recourse for the timely submission of prior art for consideration by the examiner." Notice of July 6, 1992 (1141 O.G. 63).

Dated: July 5, 2005  
Reg. No. 24,207  
Tel. No.: (414) 298-8359

  
\_\_\_\_\_  
SIGNATURE OF ATTORNEY  
Leonard J. Kalinowski  
Reinhart Boerner Van Deuren, s.c.  
(P.O. Address)  
1000 North Water Street, Suite 2100  
Attn: Linda Gabriel, Docket Clerk  
Milwaukee, WI 53202

CUSTOMER NO. 22922

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1419-MPTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet	1	of	6
-------	---	----	---

**Complete if Known**

Application Number	10/655,777
--------------------	------------

<i>Filing Date</i>	September 5, 2003
--------------------	-------------------

<i>First Named Inventor</i>	Thomas L. Beck
-----------------------------	----------------

Art Unit	2811
----------	------

**Examiner Name**

Attorney Docket Number	6514
------------------------	------

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	AA	US- 3,343,409	09/26/1967	Gibbs	
	AB	US- 3,585,484	06/15/1971	Dortort	
	AC	US- 3,851,995	12/03/1974	Mills	
	AD	US- 3,854,846	12/17/1974	Douglas	
	AE	US- 3,915,225	10/28/1975	Swink	
	AF	US- 3,918,843	11/11/1975	Douglas et al.	
	AG	US- 3,930,752	01/06/1976	Douglas	
	AH	US- 3,936,231	02/03/1976	Douglas	
	AI	US- 3,938,910	02/17/1976	Douglas	
	AJ	US- 3,951,209	04/20/1976	Gibbs	
	AK	US- 3,963,374	06/15/1976	Sullivan	
	AL	US- 3,965,983	06/29/1976	Watson	
	AM	US- 3,998,568	12/21/1976	Hynd	
	AN	US- 4,058,757	11/15/1977	Welton et al.	
	AO	US- 4,102,394	07/25/1978	Botts	
	AP	US 4,118,148	10/03/1978	Allen	
	AQ	US- 4,145,161	03/20/1979	Skinner	
	AR	US- 4,171,185	10/16/1979	Duke et al.	
	AS	US- 4,194,393	03/25/1980	Boley	
	AT	US- 4,220,440	09/02/1980	Taylor et al.	

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

***If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.***

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 6

**Complete if Known**

Application Number	10/655,777
Filing Date	09/05/2003
First Named Inventor	Thomas L. Beck
Art Unit	2811
Examiner Name	
Attorney Docket Number	6514

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	GIBBS, S.C.: "Predicting the Behavior of Sucker-Rod Pumping Systems", JPT (July 1963, 769-78, Trans, AIME 228).	
	2	GARLOW, M.E.: Sensorless Estimation of a Sucker-Rod Pump Downhold Dynacard", Unico, Inc., August 12, 2002.	
	3	EVERITT, T.A. and JENNINGS, J.W.: An Improved Finite-Difference Calculation of Downhold Dynamometer Cards for Sucker-Rod Pumps", Paper SPE 18189, SPE Production Engineering (February 1992).	
	4	JANSEN, P.L. and LORENZ, R.D.: Accuracy Limitations of Velocity and Flux Estimation in Direct Field Oriented Induction Machines", Power Electronics and Applications, 1993, Fifth European Conference on , 1993; 312-318, Vol. 4.	
	5	LORENZ, R.D. and LAWSON, D.B.: A Simplified Approach to Continuous On-Line Tuning of Field-Oriented Induction Machine Drives", IEEE Transactions on Industry Applications, Vol. 26, No. 3, May/June 1990.	
	6	HASAN, A.R. and KABIR, C.S.: Fluid Flow and Heat Transfer in Wellbores", Society of Petroleum Engineers, Richardson, TX, 2002.	

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 3 of 6

**Complete if Known**

Application Number	10/655,777
Filing Date	September 5, 2003
First Named Inventor	Thomas L. Beck
Art Unit	2811
Examiner Name	
Attorney Docket Number	6514

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	AU	US 4,286,925	09/01/1981	Standish	
	AV	US 4,363,605	12/14/1982	Mills	
	AW	US 4,390,321	06/28/1983	Langlois et al.	
	AX	US 4,406,122	09/27/1983	McDuffie	
	AY	US 4,438,628	03/27/1984	Creamer	
	AZ	US 4,474,002	10/02/1984	Perry	
	BA	US 4,476,418	10/09/1984	Werner	
	BB	US 4,480,960	11/06/1984	Streib	
	BC	US 4,483,188	11/20/1984	McTamaney et al.	
	BD	US 4,487,061	12/11/1984	McTamaney et al.	
	BE	US 4,490,094	12/25/1984	Gibbs	
	BF	US 4,507,055	03/26/1985	Fair et al.	
	BG	US 4,508,487	04/02/1985	Taylor et al.	
	BH	US 4,508,488	04/02/1985	Pikna	
	BI	US 4,509,901	04/09/1985	McTamaney et al.	
	BJ	US 4,534,168	08/13/1985	Brantly	
	BK	US 4,534,706	08/13/1985	Palm et al.	
	BL	US 4,541,274	09/17/1985	Purcupile	
	BM	US 4,583,915	04/22/1986	Montgomery et al.	
	BN	US 4,594,665	06/10/1986	Chandra et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

MW/1214340

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

***(Use as many sheets as necessary)***

Sheet

4

Q

6

Attorney Docket Number

**Complete if Known**

Application Number

10/655,777

**Filing Date**

September 5, 2003

**First Named Inventor**

**Thomas L. Beck**

**Art Unit**

2811

**Examiner Name**

6514

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	BO	US 4,631,954	12/30/1986	Mills	
	BP	US 4,661,751	04/28/1987	Werner	
	BQ	US 4,681,167	07/21/1987	Soderberg	
	BR	US 4,695,779	09/22/1987	Yates	
	BS	US 4,741,397	05/03/1988	Weeks	
	BT	US 4,747,451	05/21/1988	Adams Jr. et al.	
	BU	US 4,830,112	05/16/1989	Erickson	
	BV	US 4,859,151	08/22/1989	Reed	
	BW	US 4,873,635	10/10/1989	Mills	
	BX	US 4,935,685	06/19/1990	Justus et al.	
	BY	US 4,971,522	11/20/1990	Butlin	
	BZ	US 4,973,226	11/27/1990	McKee	
	CA	US 5,006,044	04/09/1991	Walker Sr. et al.	
	CB	US 5,044,888	09/03/1991	Hester II	
	CC	US 5,064,349	11/12/1991	Turner et al.	
	CD	US 5,129,267	07/14/1992	Nicholls	
	CE	US 5,167,490	12/01/1992	McKee et al.	
	CF	US 5,180,289	01/19/1993	Wenholz et al.	
	CG	US 5,204,595	04/20/1993	Opal et al.	
	CH	US 5,222,867	06/29/1993	Walker Sr. et al.	

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

MW/1214340

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

***(Use as many sheets as necessary)***

Sheet	5	of	6
-------	---	----	---

**Complete if Known**

<b>Application Number</b>	<b>10/655,777</b>
---------------------------	-------------------

<b>Filing Date</b>	<b>September 5, 2003</b>
--------------------	--------------------------

<b><i>First Named Inventor</i></b>	<b>Thomas L. Beck</b>
------------------------------------	-----------------------

<i>Art Unit</i>	2811
-----------------	------

**Examiner Name**

Attorney Docket Number	6514
------------------------	------

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	CI	US 5,224,834	07/06/1993	Westerman et al.	
	CJ	US 5,230,607	07/27/1993	Mann	
	CK	US 5,237,863	08/24/1993	Dunham	
	CL	US 5,246,076	09/21/1993	Watson	
	CM	US 5,251,696	10/12/1993	Boone et al.	
	CN	US 5,252,031	10/12/1993	Gibbs	
	CO	US 5,281,100	01/25/1994	Diederich	
	CP	US 5,284,422	02/08/1994	Turner et al.	
	CQ	US 5,316,085	05/31/1994	Dawson	
	CR	US 5,318,409	06/07/1994	London et al.	
	CS	US 5,362,206	11/08/1994	Westerman et al.	
	CT	US 5,372,482	12/13/1994	London et al.	
	CU	US 5,425,623	06/20/1995	London et al.	
	CV	US 5,441,389	08/15/1995	Wolcott et al.	
	CW	US 5,444,609	08/22/1995	Swamy et al.	
	CX	US 5,458,466	10/17/1995	Mills	
	CY	US 5,634,522	06/03/1997	Hershberger	
	CZ	US 5,819,849	10/13/1998	Booth	
	DA	US 5,823,262	10/20/1998	Dutton	
	DB	5,829,530	11/03/1998	Nolen	

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 6 of 6

**Complete if Known**

Application Number	10/655,777
Filing Date	September 5, 2003
First Named Inventor	Thomas L. Beck
Art Unit	2811
Examiner Name	
Attorney Docket Number	6514

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YY <sup>2</sup>	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	DC	US 5,868,029	02/09/1999	Paine	
	DD	US 5,941,305	08/24/1999	Thrasher et al.	
	DE	US 5,996,691	12/07/1999	Norris et al.	
	DF	US 6,041,856	03/28/2000	Thrasher et al.	
	DG	US 6,043,569	03/28/2000	Ferguson	
	DH	US 6,079,491	06/27/2000	Stuebinger et al.	
	DI	US 6,092,600	07/25/2000	McKinzie et al.	
	DJ	US 6,127,743	10/03/2000	Levin et al.	
	DK	US 6,129,110	10/10/2000	Kolb	
	DL	US 6,155,347	12/05/2000	Mills	
	DM	US 6,176,682	01/23/2001	Mills	
	DN	US 6,464,464	10/15/2002	Sabini et al.	
	DO	US 6,585,041	07/01/2003	Crossley	
	DP	US 5,129,264	07/14/1992	Lorenc	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

MW/1214340